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Abstract

Dual career collegiate athletes, who combine sporting endeavours with academic studies, are commonplace in high-performance sport. Sleep is an important aspect of physical and psychological recovery for athletes, plays a role in memory and learning and is associated with academic achievement. The aim of this study was to assess variations in sleep characteristics of collegiate swimmers to understand the incidence of poor sleep, and which stressors might contribute towards this. A total of 22 (male *n* = 13, female *n* = 9) high-performance student swimmers (mean ± SD; age 20 ± 2 years) participated in this study. Sleep/wake behaviour was assessed using the Pittsburgh Sleep Quality Index each month over a twelve-month period. Additionally, academic and sporting commitments were quantified on a monthly basis and summarised as 4 stressors: average weekly training hours, total number of competitive races, total number of academic assessments, and average weekly learning hours. On average across the 12-month period, 41.7% of athletes reported poor sleep. The latest bedtimes, wake times and longest sleep durations were found in the months where academic and training demands were lowest. A statistically significant positive association was identified between median sleep quality scores and mean number of academic assessments ($\rho_{(12)} = 0.71$, $p=0.005$). Hierarchal linear modelling analysis determined that number of academic assessments best predicted sleep quality within this cohort. The present study highlights the need for those working with athletes who have competing academic demands to consider sleep quality, and its potential impact on performance and wellbeing.

Key Words – education, training, recovery, lifestyle, stress.

Introduction

The duration, quality, and circadian timing of sleep episodes are determinants of the ability to maximise training responses, recover from exercise and perform optimally in competition (Kirschen, Jones & Hale, 2020). The role of sleep in learning and memory has also been identified previously (Exelmans & Van del Bulck, 2019) which is particularly important to high-performance student athletes in the pursuit of both academic success and skill or technical development in their sport (Brauer, Athey, Ross & Grandner, 2019). Previously, athletes have rated sleep as vital for optimal competitive performance (Venter, 2014), and this has been demonstrated in a sample of 576 elite Brazilian athletes, where poor sleep quality was associated with an increased probability of loss during competition (Brandt, Bevilacqua & Andrade, 2017).

Despite athletes' acknowledgement of sleep's importance, restricted sleep durations have been chronically reported within the athletic population (Knufinke, Nieuwenhuys, Geurts, Coenen & Kompier, 2018). Through the assessment of habitual sleep/wake patterns of 124 athletes, including 18 elite swimmers, Lastella, Roach, Halson & Sargent (2015) demonstrated an average sleep duration of only 6.8 ± 1.1 hours. This is below the seven hours minimum recommended sleep duration for healthy adults by the American Academy of Sleep Medicine (Watson et al., 2015). Furthermore, research states there is a need for an even greater sleep duration, of up to 9 hours per night, for well-trained athletes (Marshall & Turner, 2016). In high-performance swimming, a mean sleep duration of only 5.4 ± 1.3 hours was found on nights preceding early morning training sessions (Sargent, Halson & Roach, 2014). With early morning sessions commonplace in high-performance swimming, this finding suggests that swimmers are at a greater risk of constrained sleep durations than those of other sports.

In addition to limited sleep duration, elite athletes also commonly experience a poor quality of sleep. Biggins et al. (2019) found that nearly 60% of 58 elite student athletes, including nine international swimmers, experienced mild or moderate sleep issues and poor sleep hygiene. There are a variety of reasons as to why high-performance athletes may experience a poor sleep quality. Periods of congested training have been shown to negatively influence the ability to obtain optimal sleep, especially with the inclusion of early morning sessions (Sargent, Lastella, Halson & Roach, 2014). In swimming, Forndran, Lastella, Roach, Halson & Sargent (2012) investigated the influence of training time on the sleep patterns of 10 Olympic swimmers and found that early morning training was associated with lower sleep duration and decreased sleep efficiency. This suggests that strict training schedules with early starts confine the duration and quality of sleep that swimmers obtain. In addition, the development of anxiety and stress around competition has shown to undermine sleep. Walsh, Sanders, Hamilton & Walshe (2019) discovered an extended sleep-onset latency in national and international swimmers during a competition phase compared to a training phase, understood to be partly caused by pre-competition anxiety. These findings advocate that a greater prominence of poor sleep quality may be found in high-performance swimmers during periods with an increased occurrence of competition. Additional explanations for the poor sleep quality of athletes more generally include long distance travel, caffeine ingestion and concurrent academic commitments (Brauer et al., 2019).

Dual career athletes, who combine sporting endeavours with academic studies, are now commonplace in high-performance sport (Grey-Thompson, 2017). Higher education has been shown to elicit undesirable negative effects on the sleep of university students (Lund, Reider, Whiting & Prichard, 2010). In a sample of 144 university students, 59% obtained a Pittsburgh Sleep Quality Index (PSQI; Buysee, Reynolds, Monk, Berman & Kupfer, 1989) score >5 pre-examination, compared to only 8% of the same sample post-examination (Ahrberg, Dresler, Niedermaier, Steiger & Genzel, 2012). This demonstrates the potential disruptive effect of academic stress on sleep. There are consistent findings that poor sleep impairs processes which facilitate memory function and learning ability (Exelmans & Van den Bulck, 2019), consequently having a negative impact on academic performance (Okano, Kaczmarzyk, Dave & Grossman, 2019). This is an important consideration for student swimmers, who are attempting to perform simultaneously at the highest level both academically and athletically.

Collegiate athletes have to manage tight academic schedules and their associated mental stresses, alongside a highly demanding training and competition programme. The balance of this dual career can be complex (Grey-Thompson, 2017). The National Collegiate Athletic Association's (NCAA) Task Force on Sleep and Wellness concluded that sleep patterns were altered in collegiate athletes as a consequence of academic pursuits alongside training and competition demands, and identified that these athletes frequently fail to achieve restorative sleep (Kroshus et al., 2019). In agreement with this, Carter, Gervais, Adomeit and Greenlund (2020) found that the majority of 121 collegiate athletes received less than age-recommended levels of sleep, with 44% subjectively reporting poor sleep quality. These findings emphasise the prevalence of poor sleep quality in student athletes and demonstrate the need for sleep hygiene education in this population in an attempt to prevent decrements in both sporting and academic performance related to poor quality sleep.

Despite the presence of poor sleep quality within high-performance swimmers being widely documented, research into the links between sleep, health and academic and athletic performance in collegiate student swimmers is still in its relative infancy (Brauer et al., 2019). With the risk of poor sleep in student athletes being exacerbated by the stress derived from the pressure to perform both academically and athletically, there are periods where this risk is elevated such as during examinations or pre-competition (Grey-Thomson, 2017). Therefore, the present study aimed to assess variations in the sleep characteristics of high-performance student swimmers over a 12-month period, in attempt to understand the incidence of poor sleep, and the effect of potential academic and sporting stressors on sleep quality.

Materials and Methods

Participants

Prior to this prospective cohort study, the recruitment of 22 (male n = 13, female n = 9) high-performance student swimmers occurred through convenience sampling. Participants were aged between 18 and 27 years (mean ± SD; 20 ± 2 years), held a mean (SD) of 11 (±3) years of experience within competitive swimming, and trained for an average of 20 (±2.8) hours per week. The swimmers' pool-based training took place at 7:00am from Monday to Saturday, with afternoon sessions at 3:00pm on Mondays, Wednesdays and Fridays. Gym-based sessions were held on Tuesday and Thursday afternoons. Determined through personal best times in each athlete's primary event, the swimmers held a mean (SD) of 749.5 (±95.6) Fédération Internationale de Natation (FINA) points, highlighting the high-performance level of the sample. Participants attended a university with exams in December and May, with key items of coursework typically due in the periods preceding these months. There were no reported prior or existing clinically diagnosed sleep issues, and there were no significant injuries or illnesses that affected the training or competition schedule of the athletes throughout the study. All participants provided informed consent, with ethical approval obtained from the University of Edinburgh prior to the onset of the study.

Procedure

Each month over a twelve-month period, commencing in May 2018, participants completed the PSQI (described below), and additionally provided quantitative data describing the degree of academic and sporting commitment they were experiencing. The academic data quantified the number of assessments completed, and the number of hours spent both in class and within self-study throughout a typical week, of the preceding month. These factors have been identified as frequent sources of stress in university students within the Undergraduate Stress Questionnaire (Stults-Kolehmainen, Batholomew & Sinha, 2014). Additionally, the number of training hours in a typical week (both land and pool-based) and the number of competitive races completed within the preceding month were provided as markers of sporting commitment. These pieces of data were cross-referenced for accuracy with training logs maintained by the athlete's coaches. Unfortunately, it was not possible to cross-reference the accuracy of the academic data provided. However, the reliability of the participant's recall of this self-report data was assessed by comparing results given for one of the data collection months to results provided two weeks later for the same period, consistent with the methodology used in De Vriendt et al. (2011). The intra-class correlation coefficient (ICC) value of 0.97 (95% CIs 0.93 – 0.99) indicates excellent test-retest reliability of the participant's recall.

All data was provided by the athletes in the presence of the researchers within their training environment. Responses were collected by the end of the first full training week at the start of each new month. The data remained confidential and anonymous.

Materials

The PSQI, developed by Buysee et al. (1989), aims to provide a standardised, valid and reliable analysis of sleep quality, and distinguish between clinically poor and healthy sleepers. The questionnaire has seven components: subjective sleep quality; sleep duration; sleep onset latency; habitual sleep efficiency; disturbances to sleep; the use of sleep medication; and, daytime dysfunction as a result of tiredness. Once per month, participants scored each of the seven components on a 0-3 Likert scale. These seven component scores were then combined to create a global PSQI score of sleep quality (range from 0 to 21). Scores of five or above are validated indicators of a clinically poor sleep quality (Buysee et al., 1989). Average bedtime, wake time and sleep duration for the month were also reported within the questionnaire. Internal consistency of the PSQI has been reported as good, with a Cronbach's alpha value of 0.73 (Lund et al., 2010).

Statistical Analysis

The quantitative data reported were combined into four stressors, namely: average weekly training hours; total number of competitive races; total number of academic assessments; and average weekly learning hours (hours in class plus hours of self-study), for each month. The month of August was used as a baseline measure, as participants had no or very low academic and sporting commitments during this time. Monthly variations across the year in the four stressors, the global PSQI score and the seven component PSQI scores were statistically analysed using the Friedman non-parametric difference test. Where a significant result was found, post-hoc Wilcoxon signed rank tests were used to conduct pairwise comparisons between each month (except August) and baseline, with the p-values adjusted for multiple testing.

Spearman rank order correlations were calculated between the mean monthly scores of each of the four stressors and the median monthly global PSQI score across the cohort. Additionally, hierarchal linear modelling analysis (Heck, Thomas & Tabata, 2013) was used to determine which of the stressors best predicted sleep quality within this sample. This type of multi-level regression analysis takes the hierarchical nature of the data (repeated measurements within individuals) into account. Random intercept models consisting of all possible combinations of the stressors as level 1 predictor variables were compared to a null model using Chi-squared tests.

All analyses were conducted using IBM SPSS Statistics (Version 25.0, IBM, Chicago, IL, USA), with the significance level set at $p<0.05$.

Results

Bedtime, Wake Time, Sleep Duration, Mid-Sleep Time & PSQI Score

Mean (±SD) bedtime was 22:26pm (±49 mins), wake time was 06:39am (±93 mins), sleep duration was 7 hours 36 minutes (±60 mins) and mid-sleep time (half of sleep duration subtracted from wake time) was 02:50am (±66 mins). The earliest monthly mean bed, wake and mid-sleep times occurred in October, with the latest times occurring in August (Table 1). The longest mean sleep duration of the cohort was found in August, with the shortest found in April (Table 1). The median (IQR) global PSQI score across the year was 4 (±3), with the highest median score being found in May, and lowest in July and August (Table 1/Figure 1). The highest percentage of global PSQI scores greater than or equal to five occurred in May and April, with the lowest percentage occurring in August (Table 1).

Variation in Sleep Characteristics, Academic Stress & Athletic Stress across the Year

Significant differences from the baseline month of August were found within the global PSQI score ($\chi^2_{(11)}$ = 33.73, p<0.01), and two of the seven components of the PSQI: subjective sleep quality ($\chi^2_{(11)}$ = 33.14, p=0.01) and daytime function ($\chi^2_{(11)}$ = 32.47, p=0.01). Post-hoc analysis revealed a significant increase from baseline for global PSQI scores within the month of May only (Figure 1). A significant decrease in subjective sleep quality from baseline was found in January only (p=0.04). Daytime function decreased significantly from August in the months of May, September, November and April (p=0.03, 0.04, 0.01 and 0.03 respectively).

Significant differences from baseline were found for all four of the stressors (p<0.001 for each). Post-hoc analysis identified in which months each of the stressors were significantly different to August (Figure 1).

Relationship between Sleep Quality, Athletic Stress and Academic Stress

A statistically significant positive association was identified between median global PSQI scores and mean number of academic assessments within the sample ($\rho_{(12)}$ = 0.71, p=0.005); (Figure 2), demonstrating a very large effect size (Hopkins, 2010). Non-significant positive associations were identified between global PSQI scores and number of weekly learning hours, number of competitive races and number of weekly training hours ($\rho_{(12)}$ = 0.37, p=0.118, $\rho_{(12)}$ = 0.17, p=0.30 and $\rho_{(12)}$ = 0.36, p=0.128 respectively).

Explaining the Variation in Sleep Quality using Athletic and Academic Stress

Hierarchal linear modelling analysis identified a null model with a -2 log likelihood of 980.6. Through modelling all possible combinations of the four stressors, the best fit to the sleep quality data was found for the model consisting of number of weekly training hours and number of academic assessments as predictor variables, as below:

$$Y_{ij} = \gamma_{00} + \gamma_{10} training\ hours_{ij} + \gamma_{20} assessments_{ij} + \mu_{oj} + \varepsilon_{ij}$$

Where Y_{ij} represents the PSQI score for individual i at time j, γ_{00} is the mean intercept across all individuals (3.282, SE = 0.400, p<0.001), γ_{10} is the regression coefficient for training hours (0.351, SE = 0.014, p = 0.015), γ_{20} is the regression coefficient for academic assessments (0.214, SE = 0.051, p<0.001), μ_{oj} is the residual variance for the intercepts and ε_{ij} represents the random variation in estimating sleep quality within individuals (Heck et al., 2013). This model has a -2 log likelihood of 953.1 and predicted 10.4% of the variance in the sleep quality of the sample, with number of academic assessments predicting the greatest proportion of the variance (8.0%). When compared to the null model, the Chi-square difference test identified a significantly better fit to the data for this model ($\chi 2 = 5.95$, $p<0.05$). Adding the other stressors as predictor variables did not significantly improve the fit of the model.

Discussion

The present study aimed to assess variations in sleep characteristics of high-performance collegiate swimmers over a 12-month period of varying athletic and academic stress, in order to understand the incidence of poor sleep and attempt to identify possible stressors that contribute to poor sleep quality within this population. The principal findings demonstrate that there is a high incidence of poor sleep quality within the sample; that sleep appears to be seasonal and related to the degree that the swimmer's daily routines are dictated by education and training schedules; and that academic stress appears to be highly associated with changes in sleep.

Across the study, 42% of global PSQI scores were five or greater, demonstrating a high degree of poor sleep quality within the cohort. Comparably, Mah, Kezirian, Marcello & Dement (2018) discovered that 42.4% of 628 collegiate athletes scored five or greater on the PSQI, with a mean score of 5.4 ± 2.5 across the entire sample, highlighting the prevalence of poor sleep quality observed within the student athlete population. Within the current study, the mean sleep duration reported was 7 hours 36 minutes (±60 minutes), with 75% of the monthly average sleep durations being below 8 hours per night. It has been advised that high-performance athletes could require up to 9 hours sleep each night (Marshall & Turner, 2016), suggesting that this sample do not obtain a sufficient nightly sleep duration. The findings of the present study are in agreement with those of Sargent et al. (2014) who found that 88% of the sleep periods of 70 athletes over a 2-week training block, including 13 elite swimmers, had a duration of less than 8 hours. The current study highlights and supports the body of evidence suggesting that collegiate swimmers do not often obtain a sufficient duration of high-quality sleep, potentially having negative implications for academic performance (Okano et al., 2019), athletic performance (Kirschen et al., 2020) and mental wellbeing (Walter, 2002).

Variations in sleep characteristics across the year were assessed through comparison to the month of August as a baseline. Across the sample, average global PSQI scores were significantly different to August in May only (p=0.04), when the highest median score of 5.5 (IQR 4.0) was recorded. Also within the month of May, significantly higher values were reported for each of the four stressors compared to baseline, demonstrating elevated sources of stress from both the athlete's academic and athletic careers (as shown in Figure

1), suggesting a potential association between the sleep of the athletes and the academic and athletic stress they were under. Correspondingly, a decrease in sleep quality was observed in international swimmers throughout a competition phase compared to a standard training phase of their season, understood to be the result of anxiety caused by the stress of competition (Walsh et al., 2019). Furthermore, in a study by Lund et al. (2010) where 60% of 1125 students were classified as clinically poor sleepers (PSQI score >5), the participants overwhelmingly attributed their poor sleep to academic and emotional stress. These findings appear to suggest that there is a substantial risk of poor sleep for high-performance student swimmers when either academic or sporting stress is elevated. However, it must be noted that in other months where both academic and athletic stress were also elevated (November and April), average PSQI scores were not significantly different to baseline. One possible explanation for this is that the academic assessments completed in May generally have a greater weighting and contribution to academic achievement than those in other times of the year, therefore these assessments may have elicited academic stress to a greater extent. In accordance, a longitudinal study following 186 Canadian students across their four years of university found that fewest sleep hours and more sleep disturbances were reported during periods of highest academic stress in the students later, and more important, years (Galambos, Vargas-Lascano, Howard & Maggs, 2013). Taken together, it would appear the sleep of the collegiate swimmers of the current study was most negatively affected when academic stress was likely greatest.

The latest bedtimes, wake times and mid-sleep times of the sample, alongside the longest sleep durations, were found in the months of June, July and August, demonstrating an apparent phase delay in the summer months. An abrupt change in sleep behaviours was observed when academic and training demands increased from September to May. Using a modified PSQI for work and non-workdays, Pilz, Keller, Lenssen & Roenneberg (2018) concluded that the PSQI was a reflection of usual sleep behaviour on workdays, where fixed work schedules or social pressures dictate an individual's daily schedule. Therefore, the shift in mid-sleep time and increase in sleep duration observed in the summer months could be a direct consequence of less social pressure from the swimmer's sporting and academic careers, resulting in less rigidity in their daily schedule. In accordance, Surda et al. (2019) discovered that the total sleep time of elite swimmers was significantly reduced during nights preceding early morning training sessions. These findings suggest that the sleep of student swimmers may be improved by reducing the strictness of their daily schedules, especially early in the morning.

A statistically significant positive association was identified between monthly PSQI scores and number of academic assessments ($\rho_{(12)}$=0.71, p=0.005, Figure 2), suggesting a possible association between assessment load and negative sleep behaviour. Moreover, it was discovered that the variance in sleep quality across the sample was best predicted by a model consisting of training hours and number of academic assessments as predictor variables, with the latter predicting a greater proportion of the variance in the data. This further supports that academic stress was highly associated with changes in sleep within this sample. In agreement with this result, Ahrberg et al. (2012) found that within a sample of 144 university students, 59% obtained a PSQI score greater than 5 pre-examination, compared to only 8% of the same sample post-examination. Therefore, it appears vital that a specific focus is given to the sleep of student athletes during periods of elevated academic stress, and that those athletes are provided with education surrounding their sleep hygiene during these phases of the academic year.

Implications

The findings of the current study highlight a strong negative association between periods of high academic stress and sleep quality, which could deeply impact a student swimmer's ability to obtain academic and sporting success, as well as negatively affecting wellbeing and mood (Brauer et al., 2019). Additionally, improved sleep was reported during the summer months, where there was a substantial reduction in the academic and sporting commitment of the athletes, resulting in less rigidity of their daily schedules. As a result, dual career athletes may require additional support in planning, monitoring and interventions regarding sleep and wellbeing in periods where academic stress is amplified. Moreover, greater consideration should be given to the influence of training and academic schedules on the sleep of student swimmers.

Practical Recommendations

The present study has highlighted the need for education surrounding the importance of sleep hygiene for student swimmers, specifically during periods of increased academic pressure. A review conducted by Vitale, Owens, Hopkins & Malhotra (2019) recommended that education on sleep hygiene should be provided to athletes when they are finding difficulty in initiating or maintaining sleep, such as during periods of elevated stress. Coaches should also be aware of the impact of training timing. Elite swimmers have reported obtaining only 5.4 ± 1.3 hours of sleep on nights before early morning training sessions (Sargent et al., 2014). Offsetting training times in the morning has previously resulted in international swimmers obtaining significantly greater sleep quantities, and reduced the degree of reported sleep disturbance (Walsh et al., 2019). We therefore recommend that during periods of enhanced academic stress, the number of weekly early morning training sessions should be reduced, or ideally rescheduled to other times.

Strengths, Limitations and Future Research

The strengths of the current study include the high-performance level of the sample of collegiate swimmers, and the longitudinal nature of the data being collected across a full year. Future research could look at prospectively collecting data from student athletes over the full duration of their degree programme, as the extent of stress associated with academic assessments is likely to depend on the level/year of study. Unfortunately, assessing the weighting associated with academic assessments was beyond the scope of this study.

The nature of the collection of the academic and sporting commitment data, through participant recall, as well as the inability to cross-reference the accuracy of the academic data provided, should be noted as a key limitation of this study. Additionally, it should be acknowledged that the PSQI is a self-report questionnaire and as such was an indirect measure of sleep. Furthermore, the monthly completion of the questionnaire, as directed by its creators, may not provide enough resolution to identify key peaks and troughs in sleep quality. The use of actigraphy could help to objectify and increase the resolution of future data collection (Van De Water, Holmes & Hurley, 2011).

Conclusion

This study identified that student swimmers, who combine sporting and academic commitments, do not obtain sufficient high-quality sleep, and that their sleep pattern is seasonal, likely related to periods of strict and loose training and academic schedules. Additionally, it appears that academic stress is highly associated with changes in sleep, with the greatest proportion of variance in monthly sleep quality being predicted by the number of academic assessments the athletes completed. Coaches and support staff working with athletes who have competing academic demands should therefore consider the possible influence of this dual career on sleep, and its impact on performance and wellbeing across a competitive season.

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Declaration of Interest Statement

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Figure 1. A: Median global PSQI score (±bootstrapped 95% confidence intervals), mean number of academic assessments and mean number of competitive races (±95% confidence intervals) for each month of the data collection period. **B:** Median global PSQI score (±bootstrapped 95% confidence intervals), mean weekly training hours and mean weekly learning hours (±95% confidence intervals) for each month of the data collection period. Significant differences compared to the baseline month of August (shaded) are identified with an asterisk (*p<0.05, ** p<0.01).

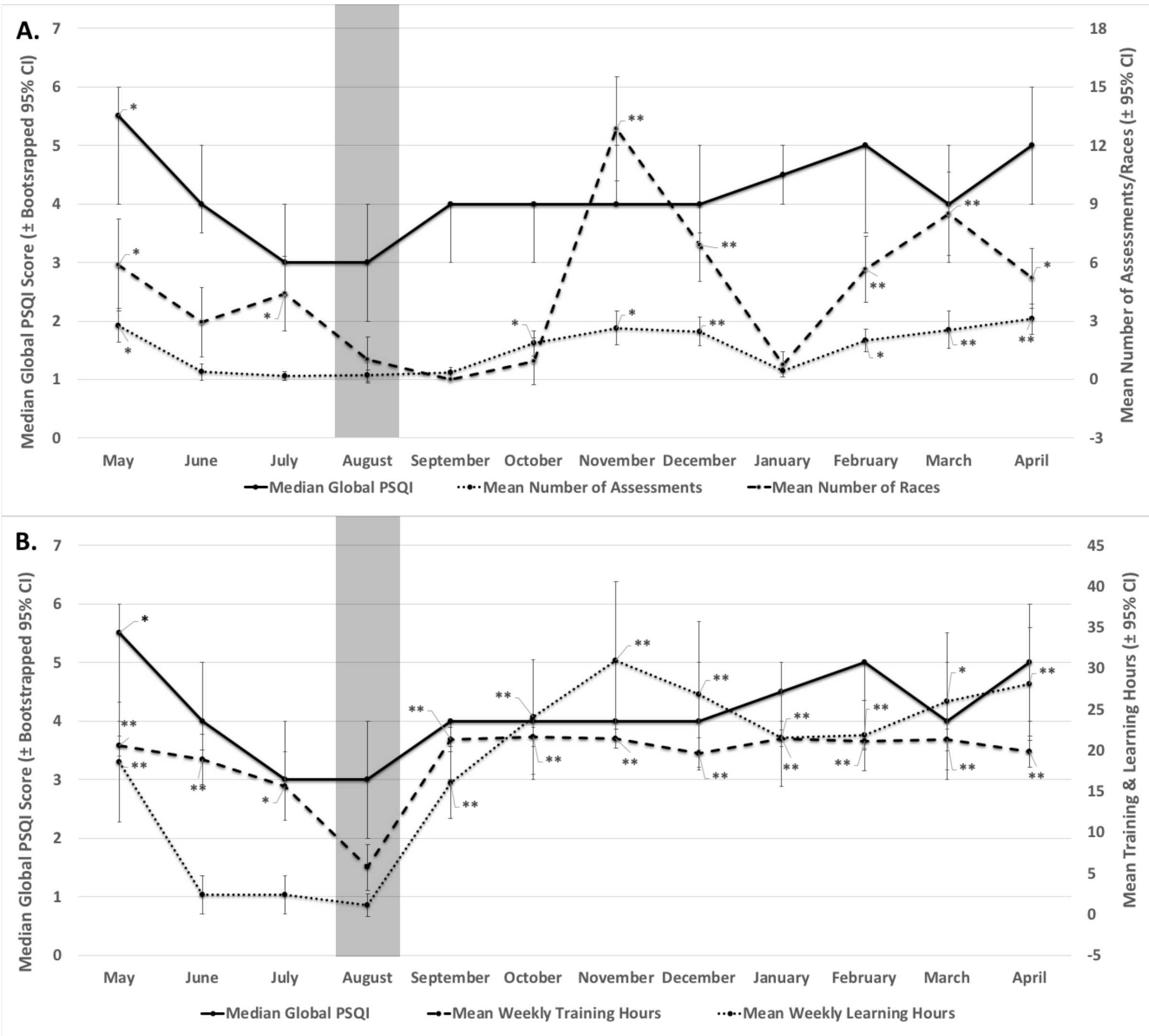

Figure 2. Scatter plot of median global PSQI scores and mean number of academic assessments for each month of the data collection period, with trend line included.

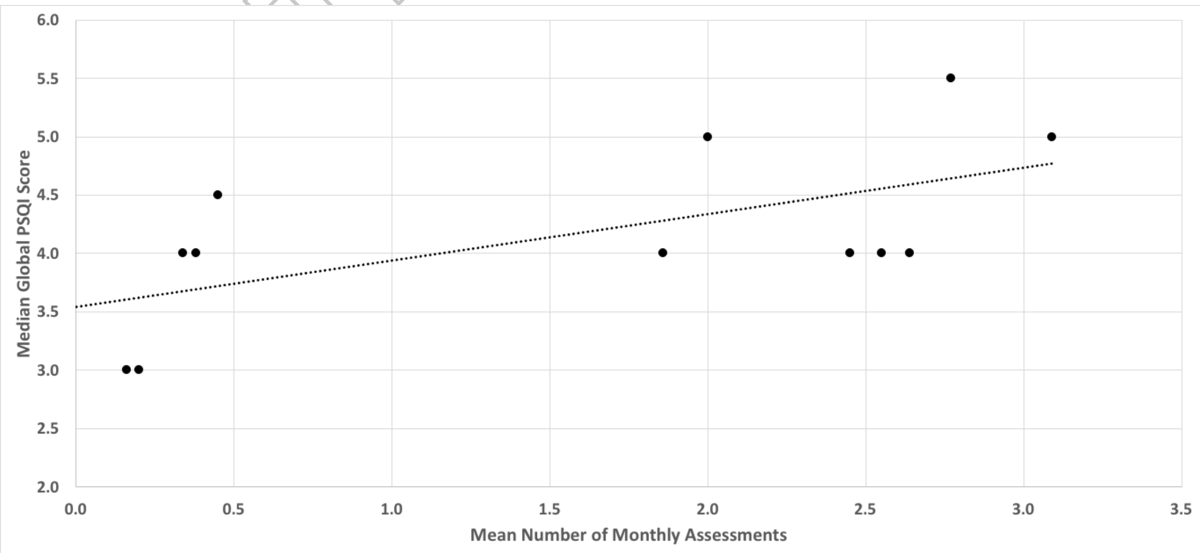

Table 1. *Average monthly bedtime, wake time, mid-sleep time, sleep duration (mean ± SD), global PSQI score (median + interquartile range) and percentage of global PSQI scores ≥5 across the 12 months of data collection.*

	Sleep Time (Time ± Mins)	Wake Time (Time ± Mins)	Mid Sleep Time (Time ± Mins)	Sleep Duration (Hrs & Mins ± Mins)	PSQI Scores (Median (IQR))	PSQI Scores ≥5 (%)
May	22:53 (32)	06:24 (48)	02:40 (32)	7:28 (50)	5.5 (4.0)	59.1
June	22:28 (34)	07:18 (58)	03:16 (45)	8:03 (47)	4.0 (3.0)	40.9
July	22:50 (70)	08:02 (94)	03:48 (98)	8:29 (58)	3.0 (2.0)	27.3
August	23:30 (77)	09:06 (75)	04:46 (67)	8:40 (67)	3.0 (2.25)	22.7
September	22:02 (35)	06:01 (56)	02:13 (45)	7:38 (37)	4.0 (2.0)	27.3
October	21:56 (34)	05:58 (53)	02:12 (46)	7:31 (41)	4.0 (2.0)	27.3
November	22:15 (31)	06:01 (47)	02:23 (38)	7:15 (45)	4.0 (3.0)	45.5
December	22:35 (35)	06:34 (65)	02:51 (48)	7:25 (56)	4.0 (3.0)	45.5
January	22:22 (33)	06:14 (64)	02:37 (47)	7:15 (58)	4.5 (2.25)	50.0
February	22:12 (38)	05:59 (47)	02:21 (32)	7:16 (57)	5.0 (2.0)	54.5
March	22:08 (40)	06:00 (52)	02:20 (38)	7:21 (50)	4.0 (2.25)	40.9
April	22:31 (34)	06:14 (42)	02:43 (28)	7:02 (52)	5.0 (3.0)	59.1